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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,913	01/10/2001	Juha Kalliokulju	324-010088-US(PAR)	8324

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EXAMINER	
CHOUDHURY, AZIZUL Q	
ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/757,913	KALLIOKULJU ET AL.	
	Examiner	Art Unit	
	Azizul Choudhury	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 September 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 January 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Detailed Action

This office action is in response to the correspondence received on September 6, 2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US Pat No: US006529527B1) in view of Maggenti et al (US Pat No: US006477150B1), hereafter referred to as Chen and Maggenti, respectively.

1. With regards to claims 1 and 12, Chen teaches through Maggenti a method of relocating the header compression context in a packet network which transmits packets having compressed headers, said method comprising: establishing a connection between a mobile terminal and a first network entity including storing context information used with compression and decompression of the headers of the packets at the mobile terminal and the first network entity; stopping the context information updating in the mobile terminal and in the first network entity; taking a snapshot of the compression and decompression context information in the first network entity including storing said context information snapshot in the first network entity; and changing the connection between the first network entity and the mobile terminal to a connection

between the mobile terminal and a second network entity including transferring the content information snapshot stored by the first network entity to the second network entity which is stored by the second network entity as the context information of the second network entity and using the stored context information at the mobile terminal and the second network entity for compression and decompression of the headers of the packets

(Chen's design teaches wireless communication network that uses mobile (column 4, lines 15-28, Chen) and base stations (column 4, lines 54-67, Chen). The network within which these devices function in use compressed headers (column 3, line 3, Chen). In addition, Chen's design allows for the mobile station (such as a mobile phone) to transition its communication from a first base station to a second base station (column 5, lines 5-9, Chen). When such transitions in communication occur, the context information is transferred from the first base station to the second base station as claimed. Furthermore, the existence of context information is obvious since the context information is basically state information in the header detailing whether or not the header is compressed or decompressed. Since Chen's design allows for header compression, it is obvious that such state information is present within Chen's design. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design

also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

2. With regards to claims 2 and 13, Chen teaches through Maggenti a method wherein: said context information updating is stopped by disabling the mobile terminal and the first network entity decompressors from sending acknowledgements to the compressor of the opposite side

(Chen's design allows for the mobile station (such as a mobile phone) to transition its communication from a first base station to a second base station (column 5, lines 5-9, Chen). When such transitions in communication occur, the context information is transferred from the first base station to the second base station. It is inherent that when the context information is transferred from one base station to another, that the context information updating is stopped. It has to be stopped for the transition of base stations to occur. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design

also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

3. With regards to claims 3 and 14, Chen teaches through Maggenti a method wherein: said content information updating is stopped by stopping the mobile terminal to compress and transmit uplink data and stopping the first network entity to compress and transmit downlink data

(Chen's design allows for the mobile station (such as a mobile phone) to transition its communication from a first base station to a second base station (column 5, lines 5-9, Chen). When such transitions in communication occur, the context information is transferred from the first base station to the second base station. It is inherent that when the context information is transferred from one base station to another, that the context information updating is stopped. It has to be stopped for the transition of base stations to occur. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design

also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

4. With regards to claims 4 and 15, Chen teaches through Maggenti a method wherein: said taking a snapshot of the compression and decompression context information in the first network entity is delayed until said transmitted uplink data and downlink data has been received and decompressed

(Chen's design allows for the mobile station (such as a mobile phone) to transition its communication from a first base station to a second base station (column 5, lines 5-9, Chen). When the context information in such situation is transferred from one base station to another, the claimed snapshot must be taken (otherwise known as simply copying the context information). In addition, it is inherent that such a snapshot only may be taken when all the data has been received as claimed. Without all the data having been received, it is of no use to take a snapshot. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design

also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

5. With regards to claims 5 and 16, Chen teaches through Maggenti a method wherein: said context information updating is stopped by discarding in the first network entity compression/decompression acknowledgements from the mobile terminal

(Chen's design allows for the mobile station (such as a mobile phone) to transition its communication from a first base station to a second base station (column 5, lines 5-9, Chen). When such transitions in communication occur, the context information is transferred from the first base station to the second base station. It is inherent that when the context information is transferred from one base station to another, that the context information updating is stopped. It has to be stopped for the transition of base stations to occur. To stop the updating between the network entities claimed, it is inherent that stopping their communication (stopping their acknowledgements is the same as stopping communication in network protocols since for communications to proceed in networks, acknowledgements must be received and sent by participating network entities) is required. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

6. With regards to claims 6 and 17, Chen teaches through Maggenti a method wherein: said context information updating is stopped by disabling in the first network entity to send compression/decompression acknowledgements to the mobile terminal

(Chen's design allows for the mobile station (such as a mobile phone) to transition its communication from a first base station to a second base station (column 5, lines 5-9, Chen). When such transitions in communication occur, the context information is transferred from the first base station to the second base station. It is inherent that when the context information is transferred from one base station to another, that the context information updating is stopped. It has to be stopped for the transition of base stations to occur. To stop the updating between the network entities claimed, it is inherent that stopping their communication (stopping their acknowledgements is the same as stopping communication in network protocols since for communications to proceed in networks, acknowledgements must be received and

sent by participating network entities) is required. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

7. With regards to claims 7 and 18, Chen teaches through Maggenti a method wherein: sending a context update request from the first network entity to the second network entity, in response to a detection of a context update request sent by the mobile terminal in the first network entity; and sending the first packet from the second network entity to the mobile terminal as a packet containing said context update request

(Chen's design allows for the mobile station (such as a mobile phone) to transition its communication from a first base station to a second base station (column 5, lines 5-9, Chen). Since such transitions in communication occur in Chen's design, means by which to perform the claimed steps must be present within Chen's design. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

8. With regards to claims 8 and 19, Chen teaches through Maggenti a method wherein: sending a context update request from the first network entity to the second network entity, in response to a detection of out-of-synchronism of the context information in the first network entity; and sending the first packet from the second network entity to the mobile terminal as a packet containing said context update request

(Chen's design allows for synchronization and resynchronization (column 5, lines 19-58, Chen), hence means for out-of-synchronization must be present. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

9. With regards to claims 9 and 20, Chen teaches through Maggenti a method wherein: transferring the context information snapshot stored by the first network entity to the second network entity before changing the connection between the first network entity and the mobile terminal to a connection between the mobile terminal and a second network entity

(Chen's design allows for the mobile station (such as a mobile phone) to transition its communication from a first base station to a second base station (column 5, lines 5-9, Chen). When the context information in such situation is transferred from one base station to another, the claimed snapshot must be taken (otherwise known as simply copying the context information). In addition, it is inherent that such a snapshot only may be taken when all the data has been received as claimed. Without all the data having been received, it is of no use to take a snapshot. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

10. With regards to claims 10 and 21, Chen teaches through Maggenti a method wherein: said method is used in accordance with Robust Header Compression (ROHC) implemented in a UMTS system

(Chen's design allows for mobile devices such as PDAs and mobile phones (column 4, lines 15-28, Chen). In addition, no limitation is made on protocols, in fact, any protocols that allow for the spirit of the design to remain intact is acceptable (column 11, lines 29-35, Chen). Since ROHC and UMTS are standards used by mobile devices such as PDAs and mobile phones and such devices are permissible within Chen's design, they are permissible within Chen's design. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to

provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

11. With regards to claim 11, Chen teaches through Maggenti a method wherein: performing said relocation overlapping with serving radio network subsystem (SRNS) relocation

(Chen's design allows for mobile devices such as PDAs and mobile phones (column 4, lines 15-28, Chen) (both of which use radio signals). In addition, no limitation is made on protocols, in fact, any protocols that allow for the spirit of the design to remain intact is acceptable (column 11, lines 29-35, Chen). Since SRNS is a standard used by mobile devices such as PDAs and mobile phones and such devices are permissible within Chen's design, they are permissible within Chen's design. However, Chen's design does not disclose ending the transmission of the context header.

Maggenti also teaches a wireless communication network (Figure 2, Maggenti). The design teaches that header compression means are present. In addition the design also teaches that the header field can be transmitted once and never again if the header fields remain constant over time (column 23, lines 8-46, Maggenti).

Therefore, it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Chen with those of Maggenti, to provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

Response to Remarks

The amendment received on September 6, 2005 has been carefully examined but is not deemed fully persuasive. No amendments have been made to the claims or the specifications. Instead, only concerns were relayed within the remarks portion of the amendment.

The primary concern expressed within the remarks involves the claims language of "context information." The applicant's specifications detail "context information" as being state information, used by the compressor and decompressor to compress and decompress the header, respectively (p. 2 of the applicant's specification). Hence, the context information functions as a flag to indicate the compression state of the header information. Such means are clearly obvious to one skilled in the art and obviously must be present within a design that compresses header information such as Chen's and Maggenti's.

A secondary concern expressed by the applicant's representative involves the combination of the two prior arts. The applicant's representative states that Maggenti's design allows a header to be sent once and then never again and that Chen teaches the retransmission of header information. The two prior arts demonstrate how both techniques of retransmission (Chen) and end of transmission (Maggenti) have existed and how such techniques are applicable to header transmission design (in response to the concerns expressed within the amendment filed October 12, 2004). Furthermore, motivation does exist to combine the teachings from Chen with those of Maggenti since

it would provide a wireless network featuring mobile devices and base stations (Figure 2, Maggenti).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Azizul Choudhury whose telephone number is (571) 272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AC

JASON CARDONE
SPE AU2145